Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.–22. (Canceled).

23. (Currently Amended) A heat exchanger comprising:

first and second terminating elements;

at least one tube through which a first medium is configured to flow, wherein the at least one tube comprises a first end region connected to the first terminating element and a second end region connected to the second terminating element;

a first tube part connected to the first terminating element;

a second tube part connected to the second terminating element, wherein the first and second tube parts run radially into one another at least over a partial region of their axial extent, wherein one of the first and second tube parts comprises two continuous ring-like elements protruding radially towards the other of the first and second tube parts; and

at least one sealing element disposed between the two ring-like elements in a spatial region between the first and second tube parts,

wherein the two continuous ring-like elements form at least one chamber between the first tube part and the second tube part in which the at least one sealing element is disposed, and

wherein the continuous ring-like elements serve as a support that acts radially for the first and second tube parts.

24. (Canceled)

25. (Currently Amended) The heat exchanger as claimed in claim [[24]] 23, wherein the at least one chamber is formed by the first tube part and a second tube part.

26. (Currently Amended) The heat exchanger as claimed in claim [[24]] 23, wherein the chamber is at least substantially sealed off by the two ring-like elements.

27. (Currently Amended) The heat exchanger as claimed in claim [[24]] 23, wherein the chamber is not sealed off by the two ring-like elements.

28. (Currently Amended) The heat exchanger as claimed in claim [[24]] 23, wherein the chamber is at least partially filled with an elastic medium which comprises the at least one sealing element.

29. (Previously Presented) The heat exchanger as claimed in claim 28, wherein the chamber is filled such that the elastic medium forms an annular element extending radially between the first and second tube parts.

30. (Currently Amended) The heat exchanger as claimed in claim [[24]] 23, wherein the at least one sealing element is laid into the chamber as a ring element.

31. (Currently Amended) The heat exchanger as claimed in claim [[24]] 23, wherein the at least one sealing element can be introduced into the chamber as a pasty or gel ~~gel-like~~ medium.

32. (Currently Amended) The heat exchanger as claimed in claim [[24]] 23, wherein the first and second tube parts form a substantially sealed spatial region when the first and second tube parts are connected at their respective terminating elements and the at least one sealing element is provided in the chamber, wherein at least two connection elements are provided such that a second medium is configured to flow through the spatial region through the connection elements.

33. (Previously Presented) The heat exchanger as claimed in claim 32, wherein the second medium flows around the at least one tube through which the first medium flows.

34. (Previously Presented) The heat exchanger as claimed in claim 23, wherein the continuous ring-like elements are spaced apart in an axial direction.

35. (Previously Presented) The heat exchanger as claimed in claim 23, wherein the continuous ring-like elements form integral constituents of the one of the first and second tube parts.

36. (Previously Presented) The heat exchanger as claimed in claim 23, wherein the continuous ring-like elements are additional components connected to the one of the first and second tube parts.

37. (Canceled)

38. (Previously Presented) The heat exchanger as claimed in claim 23, wherein the continuous ring-like elements serve as axial bearings.

39. (Previously Presented) The heat exchanger as claimed in claim 23, wherein the at least one tube comprises a plurality of tubes through which the first medium flows, wherein the plurality of tubes are arranged substantially parallel to one another radially inside the first and second tube parts.

40. (Previously Presented) The heat exchanger as claimed in claim 39, wherein the plurality of tubes are each connected, at their respective first end regions, to the first terminating element and are each connected, at their respective second end regions, to the second terminating element.

41. (Previously Presented) The heat exchanger as claimed in claim 23, wherein at least one of the first and second end regions of the at least one tube is connected to a connection element for supplying the first medium, discharging the first medium, or a combination thereof.

42. (Previously Presented) The heat exchanger as claimed in claim 23, wherein at least one of the first and second terminating elements is connected to at least one connection element for supplying the first medium, discharging the first medium, or a combination thereof.